

Notice of Allowability

Application No.

10/776,662

Applicant(s)

ENGELLAND ET AL.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Response filed on 11/28/06.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Minh-Chau Pham
Patent Examiner
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Allowable Subject Matter

Claims 1-13 allowed.

The closest relevant art is the European reference (WO 00/74818 A1), in view of the French Patent (FR 2,034,160), and further in view of Finnerty et al (6,190,432 B1).

The European reference discloses a method of installing a filter cartridge into a housing comprising the steps of providing a filter cartridge (500) with a seal arrangement (543) including a sealing gasket (544) positioned to axially seal the filter inside the housing (page 44, line 30 through page 45, line 22), a projection arrangement including projections (see 814 in Fig. 42) extending outwardly from opposite side of the filter sheath (page 43, line 24 through page 44, line 1), providing a filter housing with first and second opposite ends and sidewall defining a top, a bottom and opposite sites and an access cover removable from the housing (see details of Fig. 1), inserting the filter cartridge into the housing by engaging the projections extending outwardly from opposite sides of the filter sheath (page 44, lines 4-10), sealing the filter cartridge into the housing by compressing the seal arrangement in thickness (page 44, line 30 through page 45, line 6), and retaining biasing engagement between the housing and the filter cartridge via a retention or lift mechanism (602) (see page 45, line 23 through page 46, line 4; page 47, lines 8-14). Claims 1-13 differ from the disclosure or the European reference in that the filter cartridge comprising a sheath surrounding the filter having projections for biasing the filter cartridge against an end of the housing with the seal arrangement, and a z-filter media within a sheath. The French reference discloses a sheath (B) positioned surrounding the filter media (15), a projection arrangement

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including projections (17) extending outwardly from opposite sides of the sheath (B), a filter cartridge (15) being positioned inside the housing with a portion of the air cleaner arrangement in engagement with the projections (17) on the sheath (B) and thereby axially driving the filter cartridge (15) and axially sealing the seal arrangement (4-7) against the housing (see Figs. 2 & 3). Finnerty et al disclose an air filter cartridge (see Figs. 10 & 11) comprising a z-filter media (455) coiled in a non-circular configuration having two semi-circular ends (511, 512) and which are joined by a pair of straight segments.

Claims 1-13 of this instant patent application differ from the disclosure of the European reference (WO 00/74818 A1), the French Patent (FR 2,034,160), and Finnerty et al (6,190,432 B1) in that the filter being a z-filter having a sheath with a projections extending outwardly from opposites sides of the sheath and the step of sealing the filter cartridge in the housing by engaging the projections extending outwardly from opposite sides of the sheath with structure inside of the housing and biasing the filter cartridge against an end of the housing with the sealing arrangement providing an axial seal between the filter cartridge and the housing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

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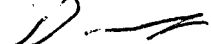
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Minh-Chau Pham
Patent Examiner
Art Unit: 1724
February 12, 2007

DUANE SMITH
PRIMARY EXAMINER


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